



Complete Summary

TITLE

Pneumonia: percent of patients with a history of smoking cigarettes who are given smoking cessation advice or counseling during hospital stay.

SOURCE(S)

Specifications manual for national hospital inpatient quality measures, version 3.0b. Centers for Medicare & Medicaid Services (CMS), The Joint Commission; 2009 Oct. various p.

Measure Domain

PRIMARY MEASURE DOMAIN

Process

The validity of measures depends on how they are built. By examining the key building blocks of a measure, you can assess its validity for your purpose. For more information, visit the [Measure Validity](#) page.

SECONDARY MEASURE DOMAIN

Does not apply to this measure

Brief Abstract

DESCRIPTION

This measure is used to assess the percent of pneumonia patients with a history of smoking cigarettes who are given smoking cessation advice or counseling during the hospital stay. For the purposes of this measure, a smoker is defined as someone who has smoked cigarettes anytime during the year prior to hospital arrival.

RATIONALE

Tobacco use is the single greatest cause of disease in the United States today. Smoking accounts for one out of every five deaths in the United States and is the most important modifiable cause of premature death. Smoking cessation treatments ranging from brief clinician advice to specialist-delivered intensive programs, including pharmacotherapy, are not only clinically effective, but also are extremely cost-effective relative to other commonly used disease prevention

interventions and medical treatments. Hospitalization can be an ideal opportunity for a patient to stop smoking, and smoking cessation may promote the patient's medical recovery. Patients who receive even brief smoking-cessation advice from their care providers are more likely to quit than those who receive no counseling whatsoever.

PRIMARY CLINICAL COMPONENT

Pneumonia; smoking cessation advice or counseling

DENOMINATOR DESCRIPTION

Pneumonia patients, 18 years of age and older, with a history of smoking cigarettes anytime during the year prior to hospital arrival (see the related "Denominator Inclusions/Exclusions" field in the Complete Summary)

NUMERATOR DESCRIPTION

Pneumonia patients (cigarette smokers) who receive smoking cessation advice or counseling during the hospital stay

Evidence Supporting the Measure

EVIDENCE SUPPORTING THE CRITERION OF QUALITY

- A clinical practice guideline or other peer-reviewed synthesis of the clinical evidence
- One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

NATIONAL GUIDELINE CLEARINGHOUSE LINK

- [Infectious Diseases Society of America/American Thoracic Society consensus guidelines on the management of community-acquired pneumonia in adults.](#)

Evidence Supporting Need for the Measure

NEED FOR THE MEASURE

Use of this measure to improve performance

EVIDENCE SUPPORTING NEED FOR THE MEASURE

Hudmon KS, Hemberger KK, Corelli RL, Kroon LA, Prokhorov AV. The pharmacist's role in smoking cessation counseling: perceptions of users of nonprescription nicotine replacement therapy. J Am Pharm Assoc (Wash DC)2003 Sep-Oct;43(5):573-82. [PubMed](#)

Kikano GE, Jaen CR, Gotler RS, Stange KC. The value of brief, targeted smoking cessation advice. Fam Pract Manag2000 Jan;7(1):50-2.

Mandell LA, Wunderink RG, Anzueto A, Bartlett JG, Campbell GD, Dean NC, Dowell SF, File TM Jr, Musher DM, Niederman MS, Torres A, Whitney CG. Infectious Diseases Society of America/American Thoracic Society consensus guidelines on the management of community-acquired pneumonia in adults. Clin Infect Dis2007 Mar 1;44 Suppl 2:S27-72. [335 references] [PubMed](#)

Sheahan SL. How to help older adults quit smoking. Nurse Pract2002 Dec;27(12):27-33; quiz 34. [PubMed](#)

The Agency for Health Care Policy and Research smoking cessation clinical practice guideline. JAMA1996 Apr 24;275(16):1270-80. [68 references] [PubMed](#)

U.S. Department of Health and Human Services, Public Health Service. Fiore MC, Bailey WC, Cohen SJ, et al. Treating tobacco use and dependence. Clinical practice guideline. Rockville (MD): U.S. Department of Health and Human Services, Public Health Service; 2000 Jun. 197 p. [311 references]

State of Use of the Measure

STATE OF USE

Current routine use

CURRENT USE

Accreditation
Collaborative inter-organizational quality improvement
External oversight/Medicaid
External oversight/Medicare
Internal quality improvement
National reporting
Pay-for-performance

Application of Measure in its Current Use

CARE SETTING

Hospitals

PROFESSIONALS RESPONSIBLE FOR HEALTH CARE

Measure is not provider specific

LOWEST LEVEL OF HEALTH CARE DELIVERY ADDRESSED

Single Health Care Delivery Organizations

TARGET POPULATION AGE

Age greater than or equal to 18 years

TARGET POPULATION GENDER

Either male or female

STRATIFICATION BY VULNERABLE POPULATIONS

Unspecified

Characteristics of the Primary Clinical Component**INCIDENCE/PREVALENCE**

In 2004, 60,207 people died of pneumonia. There were an estimated 651,000 hospital discharges in males (44.9 per 10,000) and 717,000 discharges in females (47.7 per 10,000) all attributable to pneumonia in 2005. The highest pneumonia discharge rate that year was seen in those 65 and over at 221.3 per 10,000.

EVIDENCE FOR INCIDENCE/PREVALENCE

National Center for Health Statistics. National hospital discharge survey, 1988, 2004 and 2005 [unpublished].

National Center for Health Statistics. Report of final mortality statistics, 1979-2003. National vital statistics report, preliminary data for 2004. Hyattsville (MD): National Center for Health Statistics;

ASSOCIATION WITH VULNERABLE POPULATIONS

See the "Burden of Illness" field.

BURDEN OF ILLNESS

In the United States (U.S.), pneumonia is the sixth most common cause of death. From 1979-1994, the overall rates of death due to pneumonia and influenza increased by 59%. Much of this increase is due to a greater population of persons aged 65 years or older, and a changing epidemiology of pneumonia, including a greater proportion of the population with underlying medical conditions at increased risk of respiratory infection.

According to the National Cancer Institute and the U.S. Department of Health and Human Services, more than 430,000 deaths each year are attributed to a smoking related illness; included in these deaths are roughly 4,000 infants. Smoking accounts for one out of every five deaths in the United States and is the most important modifiable cause of premature death.

See also the "Incidence/Prevalence" field.

EVIDENCE FOR BURDEN OF ILLNESS

Bartlett JG, Dowell SF, Mandell LA, File Jr TM, Musher DM, Fine MJ. Practice guidelines for the management of community-acquired pneumonia in adults. Infectious Diseases Society of America. Clin Infect Dis 2000 Aug;31(2):347-82. [218 references] [PubMed](#)

Clinical interventions to prevent tobacco use by children and adolescents. A supplement to 'How to help your patients stop smoking: a National Cancer Institute manual for physicians'. Bethesda (MD): U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health; Various p.

National Cancer Institute. Prevention and cessation of cigarette smoking: control of tobacco use. [internet]. Bethesda (MD): National Cancer Institute; 2002 Sep[accessed 2002 Dec 06]. [10 p].

Specifications manual for national hospital quality measures, version 1.04. Centers for Medicare and Medicaid Services (CMS), Joint Commission on Accreditation of Healthcare Organizations (JCAHO); 2005 Aug. various p.

UTILIZATION

Annually, 2-3 million cases of community acquired pneumonia result in 10 million physician visits, 500,000 hospitalizations, and 45,000 deaths.

See also the "Incidence/Prevalence" field.

EVIDENCE FOR UTILIZATION

Bartlett JG, Dowell SF, Mandell LA, File Jr TM, Musher DM, Fine MJ. Practice guidelines for the management of community-acquired pneumonia in adults. Infectious Diseases Society of America. Clin Infect Dis 2000 Aug;31(2):347-82. [218 references] [PubMed](#)

COSTS

Unspecified

Institute of Medicine National Healthcare Quality Report Categories

IOM CARE NEED

Getting Better
Staying Healthy

IOM DOMAIN

Effectiveness
Patient-centeredness

CASE FINDING

Users of care only

DESCRIPTION OF CASE FINDING

Discharges, 18 years of age and older, with a principal diagnosis of pneumonia *or* a principal diagnosis of septicemia or respiratory failure (acute or chronic) *and* other diagnosis code of pneumonia with a history of smoking cigarettes anytime during the year prior to hospital arrival

DENOMINATOR SAMPLING FRAME

Patients associated with provider

DENOMINATOR INCLUSIONS/EXCLUSIONS

Inclusions

Discharges, 18 years of age and older, with an International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Principal Diagnosis Code of pneumonia as defined in the appendices of the original measure documentation *or* ICD-9-CM Principal Diagnosis Code of septicemia or respiratory failure (acute or chronic) as defined in the appendices of the original measure documentation *and* an ICD-9-CM Other Diagnosis Code of pneumonia as defined in the appendices of the original measure documentation with a history of smoking cigarettes anytime during the year prior to hospital arrival

Exclusions

- Patients less than 18 years of age
- Patients who have a Length of Stay (LOS) greater than 120 days
- Patients with Cystic Fibrosis (as defined in the appendices of the original measure documentation)
- Patients who had no chest x-ray or computed tomography (CT) scan that indicated abnormal findings within 24 hours prior to hospital arrival or anytime during this hospitalization
- Patients with *Comfort Measures Only* documented
- Patients enrolled in clinical trials
- Patients discharged/transferred to another hospital for inpatient care
- Patients who left against medical advice or discontinued care
- Patients who expired
- Patients discharged/transferred to a federal health care facility
- Patients discharged/transferred to hospice

RELATIONSHIP OF DENOMINATOR TO NUMERATOR

All cases in the denominator are equally eligible to appear in the numerator

DENOMINATOR (INDEX) EVENT

Clinical Condition
Institutionalization
Patient Characteristic

DENOMINATOR TIME WINDOW

Time window is a fixed period of time

NUMERATOR INCLUSIONS/EXCLUSIONS**Inclusions**

Pneumonia patients (cigarette smokers) who receive smoking cessation advice or counseling during the hospital stay

Exclusions

None

MEASURE RESULTS UNDER CONTROL OF HEALTH CARE PROFESSIONALS, ORGANIZATIONS AND/OR POLICYMAKERS

The measure results are somewhat or substantially under the control of the health care professionals, organizations and/or policymakers to whom the measure applies.

NUMERATOR TIME WINDOW

Institutionalization

DATA SOURCE

Administrative data
Medical record

LEVEL OF DETERMINATION OF QUALITY

Individual Case

PRE-EXISTING INSTRUMENT USED

Unspecified

Computation of the Measure**SCORING**

Rate

INTERPRETATION OF SCORE

Better quality is associated with a higher score

ALLOWANCE FOR PATIENT FACTORS

Unspecified

STANDARD OF COMPARISON

External comparison at a point in time
External comparison of time trends
Internal time comparison

Evaluation of Measure Properties

EXTENT OF MEASURE TESTING

The core measure pilot project was a collaboration among The Joint Commission, five state hospitals associations, five measurement systems, and 83 hospitals from across nine states. Participating hospitals collected and reported data for community acquired pneumonia (CAP) measures from March 2001 to December 2001.

Core measure reliability visits were completed the summer of 2001 at a random sample of 16 participating hospitals across 6 states.

EVIDENCE FOR RELIABILITY/VALIDITY TESTING

The Joint Commission. A comprehensive review of development and testing for national implementation of hospital core measures. Oakbrook Terrace (IL): The Joint Commission; 40 p.

Identifying Information

ORIGINAL TITLE

PN-4: adult smoking cessation advice/counseling.

MEASURE COLLECTION

[National Hospital Inpatient Quality Measures](#)

MEASURE SET NAME

[Pneumonia](#)

SUBMITTER

Centers for Medicare & Medicaid Services
Joint Commission, The

DEVELOPER

Centers for Medicare & Medicaid Services/The Joint Commission

FUNDING SOURCE(S)

All external funding for measure development has been received and used in full compliance with The Joint Commission's Corporate Sponsorship policies, which are available upon written request to The Joint Commission.

COMPOSITION OF THE GROUP THAT DEVELOPED THE MEASURE

The measure was developed and continues to be maintained in conjunction with a multi-disciplinary Technical Expert Panel.

FINANCIAL DISCLOSURES/OTHER POTENTIAL CONFLICTS OF INTEREST

Expert panel members have made full disclosure of relevant financial and conflict of interest information in accordance with the Joint Commission's Conflict of Interest policies, copies of which are available upon written request to The Joint Commission.

ENDORSER

National Quality Forum

INCLUDED IN

Hospital Compare
Hospital Quality Alliance

ADAPTATION

Measure was not adapted from another source.

RELEASE DATE

2000 Aug

REVISION DATE

2009 Oct

MEASURE STATUS

This is the current release of the measure.

This measure updates a previous version: Specifications manual for national hospital quality measures, version 2.5b. Centers for Medicare & Medicaid Services (CMS), The Joint Commission; 2008 Oct. various p.

SOURCE(S)

Specifications manual for national hospital inpatient quality measures, version 3.0b. Centers for Medicare & Medicaid Services (CMS), The Joint Commission; 2009 Oct. various p.

MEASURE AVAILABILITY

The individual measure, "PN-4: Adult Smoking Cessation Advice/Counseling," is published in "Specifications Manual for National Hospital Inpatient Quality Measures." This document is available from [The Joint Commission Web site](#). Information is also available from the [Centers for Medicare & Medicaid Services \(CMS\) Web site](#). Check The Joint Commission Web site and CMS Web site regularly for the most recent version of the specifications manual and for the applicable dates of discharge.

COMPANION DOCUMENTS

The following are available:

- A software application designed for the collection and analysis of quality improvement data, the CMS Abstraction and Reporting Tool (CART), is available from the [CMS CART Web site](#). Supporting documentation is also available. For more information, e-mail CMS PROINQUIRIES at proinquiries@cms.hhs.gov.
- The Joint Commission. A comprehensive review of development and testing for national implementation of hospital core measures. Oakbrook Terrace (IL): The Joint Commission; 40 p. This document is available from [The Joint Commission Web site](#).
- The Joint Commission. Attributes of core performance measures and associated evaluation criteria. Oakbrook Terrace (IL): The Joint Commission; 5 p. This document is available from [The Joint Commission Web site](#).
- Hospital compare: a quality tool provided by Medicare. [internet]. Washington (DC): U.S. Department of Health and Human Services; 2009 Oct 5; [accessed 2009 Oct 12]. This is available from the [Medicare Web site](#). See the related [QualityTools](#) summary.

NQMC STATUS

This NQMC summary was originally completed by ECRI on February 7, 2003. This NQMC summary was updated by ECRI Institute on October 11, 2005, April 10, 2007, and on October 26, 2007. The Joint Commission informed NQMC that this measure was updated on August 29, 2008 and provided an updated version of the NQMC summary. This NQMC summary was updated accordingly by ECRI Institute on November 11, 2008. The information was verified by the Centers for Medicare & Medicaid Services on January 22, 2009. The Joint Commission informed NQMC that this measure was updated again on October 1, 2009 and provided an

updated version of the NQMC summary. This NQMC summary was updated accordingly by ECRI Institute on December 2, 2009. The information was verified by the Centers for Medicare & Medicaid Services on April 27, 2010.

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